

CLAIMS

1. A medical device, the device comprising a biocompatible, biodegradable filler material, wherein the device comprises at least a portion that has a shape that substantially conforms to Denovillier's space.
2. The medical device of claim 2 wherein the filler material comprises an extracellular matrix molecule.
3. The medical device of claim 2 wherein the extracellular matrix molecule is collagen.
4. The medical device of claim 2 wherein the filler material consists essentially of collagen.
5. The medical device of claim 1 wherein the filler material comprises at least one polysaccharide.
6. The medical device of claim 5 wherein the at least one polysaccharide is hyaluronic acid.
7. The medical device of claim 1 wherein the filler material is biodegradable in vivo in less than approximately 90 days.

8. The medical device of claim 1 further comprising a degradation inhibitor.
9. The medical device of claim 1 wherein the filler material is a member of the group consisting of alginate, gelatin, fibrin, fibrinogen, albumin, polylactide, polyglycolide, polycaprolactone, poly(alpha-hydroxy acid), polyethylene glycol, thixotropic polymers, thermoreversible polymers, and mixtures thereof.
10. The medical device of claim 1 further comprising a radio opaque marker.
11. The medical device of claim 1 further comprising at least one therapeutic agent.
12. The medical device of claim 11 wherein the at least one therapeutic agent is a member of the group consisting of an anti-inflammatory drug, an antibiotic, an antimycotics, a hemostat, a steroid, and an analgesic.
13. The medical device of claim 1 further comprising an osmotic agent that causes water to become associated with the filler material by osmosis.
14. The medical device of claim 1 further comprising a buffering agent.

15. The medical device of claim 1 wherein the filler material comprises a synthetic polymer.

16. The medical device of claim 1 wherein the device has a volume in the range of 10 to 200 cubic centimeters.

17. A method comprising introducing a filler to between a first tissue location and a second tissue location to increase a distance between the first tissue location and the second tissue location, and administering a dose of radioactivity to at least the first tissue location or the second tissue location.

18. The method of claim 17 wherein the first tissue location is associated with the rectum and the second tissue location is associated with the prostate gland.

19. The method of claim 17 wherein the filler is introduced into Denovillier's space.

20. The method of claim 17 wherein the first tissue location is located on a tissue that is a member of the group consisting of an ovary, a nerve, a cartilage, a bone, and a brain.

21. The method of claim 17 wherein the filler comprises a member of the group consisting of alginate, gelatin, fibrin, fibrinogen, albumin, polylactide,

polyglycolide, polycaprolactone, poly(alpha-hydroxy acid), polyethylene glycol, thixotropic polymers, thermoreversible polymers, and mixtures thereof.

22. The method of claim 17 wherein the filler comprises at least one therapeutic agent.

23. The method of claim 22 wherein the at least one therapeutic agent is a member of the group consisting of an anti-inflammatory drug, an antibiotic, an antimycotics, a hemostat, a steroid, and an analgesic.

24. The method of claim 17 wherein the filler is biodegradable in vivo in less than approximately 90 days.

25. The method of claim 17 wherein the filler is an expandable device.

26. The method of claim 25 wherein the expandable device is a balloon.

27. The method of claim 26 wherein the expandable device is a sponge.

28. The method of claim 17 wherein the filler comprises a biocompatible, biodegradable material.

29. The method of claim 28 wherein the biocompatible, biodegradable material comprises an extracellular matrix molecule.

30. The method of claim 28 wherein the biocompatible, biodegradable material consists essentially of collagen.

31. The method of claim 28 wherein the filler comprises at least one polysaccharide.

32. The method of claim 31 wherein the at least one polysaccharide is hyaluronic acid.

33. The method of claim 28 wherein the filler further comprises a member of the group consisting of a degradation inhibitor, a radio opaque marker, and an osmotic agent that causes water to become associated with the filler material by osmosis.

34. The method of claim 28 wherein the filler further comprises a buffering agent.

35. The method of claim 17 wherein the filler comprises a member of the group consisting of a degradation inhibitor, a radio opaque marker, and an osmotic agent that causes water to become associated with the filler material by osmosis.

36. The method of claim 17 wherein the filler comprises a buffering agent.
37. The method of claim 17 wherein the filler material comprises a synthetic polymer.
38. The method of claim 17 wherein the filler occupies a volume in the range of about 10 to about 200 cubic centimeters in a patient.
39. A kit, the kit comprising a filler and instructions for placing the filler between a first tissue location and a second tissue location to increase a distance between the first tissue location and the second tissue location so that the increased distance would change an amount of radiation received by at least the first tissue location or the second tissue location when at least the first tissue location or the second tissue location receives a dose of radiation.
40. The kit of claim 39 wherein the instructions provide for introducing the filler into Denovillier's space.
41. The kit of claim 39 herein the filler an expandable device.
42. The kit of claim 41 wherein the expandable device is a balloon.

43. The kit of claim 39 wherein the instructions describe a first tissue location located on a tissue that is a member of the group consisting of an ovary, a nerve, a cartilage, a bone, and a brain.

44. The kit of claim 39 wherein the instructions describe the first tissue location as being associated with the rectum and the second tissue location is being associated with the prostate gland.

45. The kit of claim 39 wherein the filler comprises a member of the group consisting of alginate, gelatin, fibrin, fibrinogen, albumin, polylactide, polyglycolide, polycaprolactone, poly(alpha-hydroxy acid), polyethylene glycol, thixotropic polymers, thermoreversible polymers, and mixtures thereof.

46. The kit of claim 39 wherein the filler comprises at least one therapeutic agent.

47. The kit of claim 46 wherein the at least one therapeutic agent is a member of the group consisting of an anti-inflammatory drug, an antibiotic, an antimycotics, a hemostat, a steroid, and an analgesic.

48. The kit of claim 39 wherein the filler is biodegradable in vivo in less than approximately 90 days.

49. The kit of claim 39 wherein the filler comprises a biocompatible, biodegradable material.

50. The kit of claim 39 wherein the biocompatible, biodegradable material comprises an extracellular matrix molecule.

51. The kit of claim 39 wherein the biocompatible, biodegradable material consists essentially of collagen, hyaluronic acid, or a mixture of thereof.

52. The kit of claim 39 wherein the filler comprises at least one polysaccharide.

53. The kit of claim 39 wherein the at least one polysaccharide is hyaluronic acid.

54. The kit of claim 39 wherein the filler further comprises a member of the group consisting of a degradation inhibitor, a radio opaque marker, and an osmotic agent that causes water to become associated with the filler material by osmosis.

55. The method of claim 39 wherein the filler further comprises a buffering agent.

56. The kit of claim 39 further comprising a device for delivering the filler.



57. The kit of claim 39 wherein the device for delivering the filler comprises a syringe.

58. The kit of claim 39 wherein the instructions relate administration of the filler to radiation doses received by the first tissue location, the second tissue location, or both the first tissue location and the second tissue location.

59. The kit of claim 39 wherein the filler comprises a synthetic polymer.

60. The kit of claim 39 wherein the filler has a volume in the range of 10 to 200 cubic centimeters after being introduced into a patient.

61. The kit of claim 39 wherein the filler has a volume in the range of 5 to 400 cubic centimeters after being introduced into a patient.